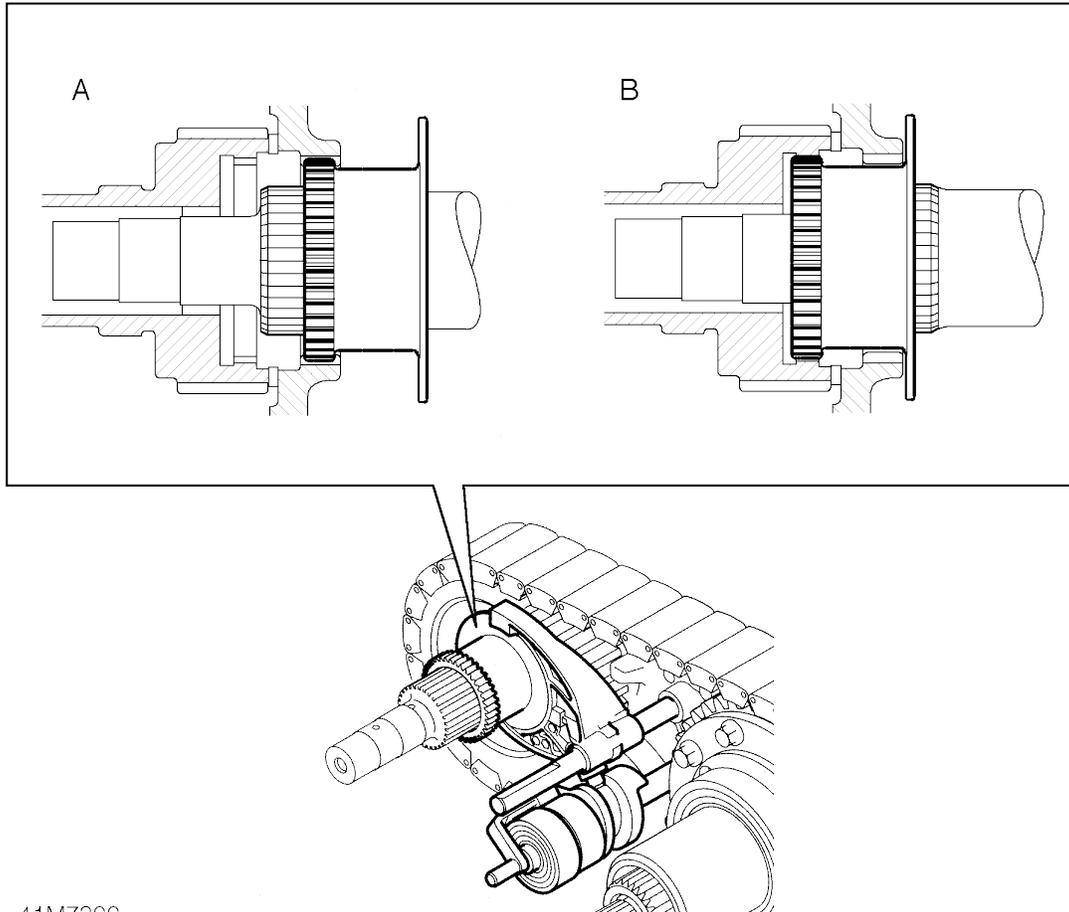


TRANSFER BOX

High and Low Range



41M7300

High and Low range are selected by the driver from a dashboard mounted switch on manual vehicles and via the selector lever on automatic vehicles. Transfer neutral is selected by inserting a 5 Amp fuse in position 11 of the driver's seat fuse box. Refer to Owner's Handbook.

Drive from the main gearbox is permanently engaged to the sun gear of the epicyclic gear set. When in High range (position B) the sun gear transmits drive directly to the reduction hub. The reduction hub and intermediate shaft rotate at the same speed as the main gearbox output shaft. When in Low range (position A) the reduction hub is driven through the planet carrier. The reduction hub and intermediate shaft rotate at a lower speed than the gearbox output shaft. When in transfer neutral, the reduction hub is positioned between the sun gear and planet carrier.

Changing between ratios is achieved by the reduction hub sliding along a splined section of the intermediate shaft to engage with the required gear. The ratio change mechanism comprises the ratio control motor, reduction hub, interlock spool and selector fork.

The interlock spool consists of a shaft which locates in the front casing and protrudes through the rear casing to engage with the ratio control motor. The shaft carries an aluminium casting with a helical cam track and two springs, which are anchored at one end to the shaft and at the other to the cam track casting.